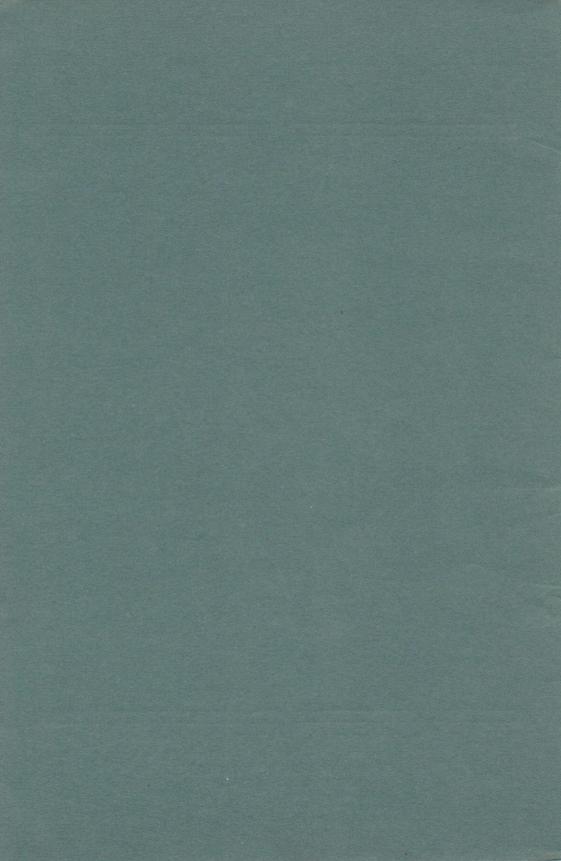
HOIST BOOK



D. ROUND & SON

CHAIN HOISTS, WINCHES TROLLEYS, CHAIN CLEVELAND, O.

CATALOG 54



ROUND CHAIN HOISTS WINCHES TROLLEYS CRANES AND CHAIN







OUR Beginning



IN 1869

FIFTY-FOUR years ago this building was the workshop of a mechanic with a vision. His shop was small—very small, his tools and forges few, his capital limited.

But, he determined to put into his products the best of all that was within himself and the best that he could obtain from others. He had faith that in doing this his products would command the attention of those who want things of honest labor and honest materials.

That mechanic was David Round.

Building upon the principles of progress in a mechanical way and fair and square dealing in a business way, the little enterprise founded in 1869 grew until today it is represented by three modern factories in three cities: Cleveland, Ohio; Wapakoneta, Ohio, and Seattle, Wash., and its products known from coast to coast.

These original policies of quality first have always been

maintained.

Men's lives depend on our products. Men have trusted our quality half a century and our ideal is to retain and increase that trust.

To those who know us of old and to those who are our more recent friends, we express our sincere thanks in appreciation of your co-operation and friendship. A warm welcome awaits you if you call when in Cleveland.

D. ROUND & SON

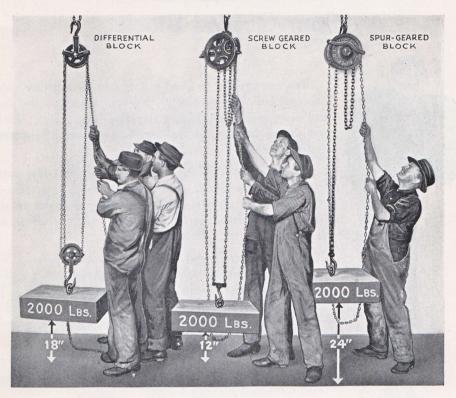
Cleveland, Ohio, U. S. A.

Manufacturers of

CHAIN HOISTS TROLLEYS WINCHES
HOISTING CRABS HIGH GRADE CHAIN
HAND POWER TRAVELING CRANES
GREY IRON CASTINGS

7

Choosing Your Hoist



There are three popular types of chain hoists. We make them all. This cut shows the amount of work each hoist will do in half a minute and the number of men required to handle the load.

In general David Round Chain Hoists are the latest design and embody all the up-to-date improvements. They are ALL TESTED before shipment. All contain the BEST OF MATERIAL AND WORKMANSHIP. ALL HOLD THE LOAD AT ANY POINT.

SUPERIOR SPUR GEARED BLOCK for high speed and high efficiency. The leader of all chain hoists, One man can lift the full load on any size up to and including 10 ton.

ROUND SCREW GEARED BLOCK for a general purpose hoist where high speed is not necessary. A good rugged type that stands rough usage.

WESTON DIFFERENTIAL BLOCK for occasional use where a dependable hoist is desired but where easy lifting is not highly essential.

Compare The Efficiency

as shown by the table below and remember all Round Hoists are Quality Built and will give 100% satisfaction.

SUPERIOR SPUR-GEARED BLOCK

80%

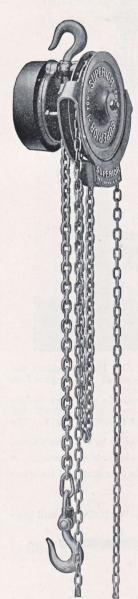
ROUND SCREW HOIST

40%

WESTON DIFFERENTIAL

31%

The Superior Spur-Geared Block



You are entitled to speed and ease in your lifting today. You get both in these blocks. Years of experience and careful designing have produced Superior Spur-Geared Blocks, which not only lift fast and easy but will outlast any other hoist made.

You are assured of the quality of every part that enters into a Superior Block. From raw material—pig iron—to the finished tested hoist it is made on our own sixteen acre factory site containing our foundry, machine shops and chain factory.

Superior Spur-Geared Blocks are one-man hoists. The one ton size enables one man to lift one ton with a pull of 82 pounds. The 10 ton size still enables one man to lift the full 10 ton with a pull of 140 pounds but of course he handles more chain in pulling the load up. Briefly Superior Blocks are high efficiency hoists.

The average efficiency of over 80% is due largely to the planetary system of Spur-gearing employed and the large well lubricated bearings described on page 6.

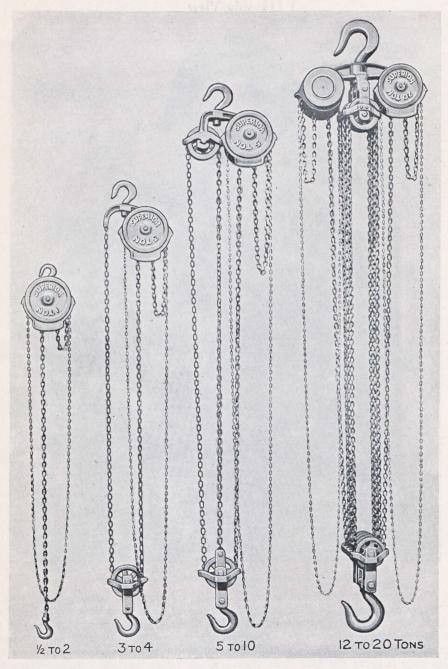
Then our Patent Hand Chain Guide absolutely prevents fouling or gagging of the chain. The Chain can be pulled from any angle and spun as fast as desired without danger of flying off or sticking. One large factory ordered 234 after trying out this feature and the whole block generally.

Every hoist is fully tested and carefully inspected before shipment and there is a wide range of sizes for your convenience. It is better to get one a little larger than you need than smaller. You have extra ease and safety and also economy in repairs.

Your dealer will gladly send you one on thirty day trial.

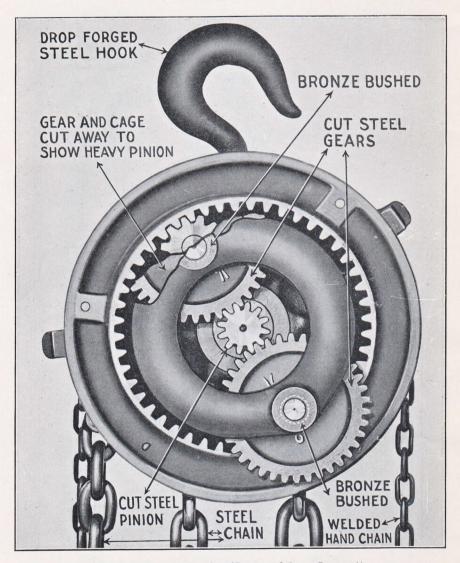
HOISTS - WINCHES - TROLLEYS - CRANES - CHAINS

Superior Spur-Geared Blocks



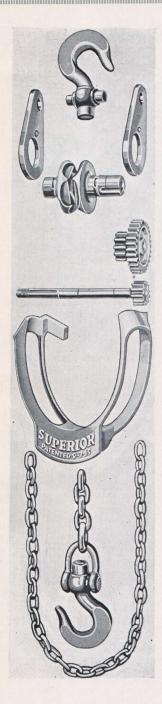
Made in 13 sizes from ½ ton to 20 ton capacities. The 2-ton capacity is the base size and the largest single load chain style. Large users of Superior Blocks find it very convenient to carry repairs for blocks as the 2 to 20 ton capacity main working parts are interchangeable.

Superior Spur-Geared Blocks Inside View



View showing the Gearing (Dust proof Cover Removed)

A simple balanced train of powerful steel gears forms the hoisting mechanism of the "Superior" Block. In all these years not one of these gears have ever come back to us broken. A pull on the hand chain turns the central pinion which causes the two intermediate gears to move. These engage through their pinions, with the large internal gear which, acting as a fulcrum, forces the pinion cage to turn. To this pinion cage is keyed the load chain sheave which raises the load. Such construction saves you repair bills.



Superior Spur-Geared Block VITAL PARTS

Top Hook

Drop forged easy-swiveling top hook. When overloaded it opens slowly because it is heat treated and thereby gives the operator a warning.

Supporting Plates

These are an extra safety feature. They are made of steel and join the top hook to the load wheel.

Load Wheel

This is a steel wheel of oversize design. The teeth are large, making a very durable wheel for this vital position.

Spur-Gear

These gears are cut gears with accurate fitting teeth. They are bronze bushed. Of course they are made of steel.

Pinion Gear

This important part is made from a steel forging. It is a cut gear.

Hand Chain Guide

Our patented hand chain guide positively prevents the hand chain from gagging or sticking. The operator can spin the hand chain at any speed for it will always meet the wheel squarely.

Load Chain

This is made of special analysis steel and fits the wheel perfectly. A large guide insures the chain meeting and continuing around the wheel.

Bottom Hook

A drop forged hook made of special analysis steel. Heat treated same as top hook.

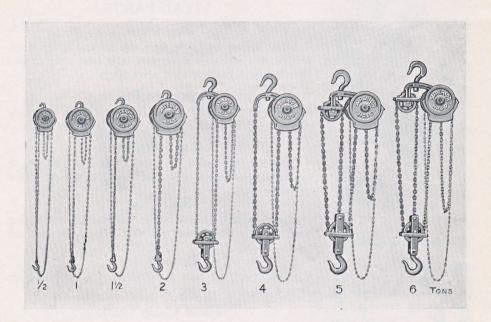
Hand Chain

Smooth fire welded hand chain of the very best quality.

Only the Best

is good enough for Superior Spur-Geared Blocks. The load is supported on steel from top to bottom in the most modern manner. All the latest improvements are used and in choosing this hoist you are getting the best that up-to-date designing and manufacturing can give.

Superior Spur-Geared Blocks

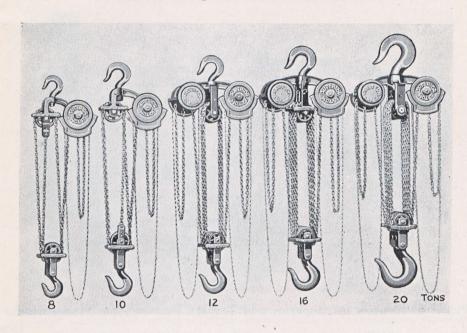


Price List of Complete Hoists 1/2 to 20 Ton

Capacity in Tons	Price of Hoist, Regular Lift	Regular Lift in Feet	Price of Extra Lift, per Foot	Shortest Distance Between Hooks	Size of Packing Box in Inches
1/2	\$70.00	8	\$1.80	13 in.	14x14x11
1	90.00	8	1.90	16 "	18x15x12
1 1/2	120.00	8	2.00	18 "	19x17x16
2	140.00	9	2.10	21 "	21x21x19
3	180.00	10	3.00	32 "	25x20x17
4	220.00	10	3.20	37 "	28x21x18
5	280.00	12	4.30	45 "	32x25x19
6	330.00	12	4.30	46 "	32x25x19
8	400.00	12	5.40	49 "	37x28x20
10	480.00	12	6.50	54 "	43x29x21
12	600.00	12	8.60	54 "	46x40x21
16	720.00	12	10.80	62 "	46x40x21
20	850.00	12	13.00	70 "	51x47x22

^{*}We can supply any length lift desired. For speed,

Superior Spur-Geared Blocks

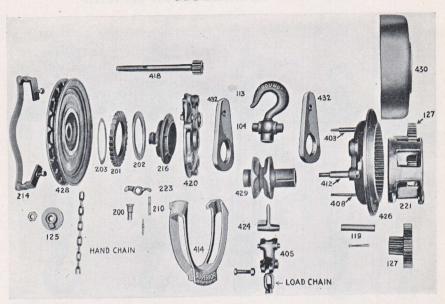


Information on Speed, Pull Required and Weights

Capacity	Chain Handled to Lift Load	Chain Pull to Lift	Length	in Feet	Weight of Block		
in Tons	One Foot	Full Load	Load	Hand	Net	Gross	
1/2	21	62	9	16	58	75	
1	31	82	9	16	91	114	
11/2	35	110	9	16	132	160	
2	42	120	10	18	201	245	
3	69	114	24	22	208	255	
4	84	124	25	24	300	350	
5	126	110	44	29	410	480	
6	126	130	44	- 29	410	480	
8	168	135	58	30	495	575	
10	210	140	72	30	600	700	
12	126*	130*	93	30	840	1000	
16	168*	135*	117	30	1040	1300	
20	210*	140*	146	30	1375	1640	

^{*}The 12, 16 and 20 ton sizes, you will note from the illustration, are two unit blocks. These figures are for each hand chain.

Repair Parts For Superior Spur-Geared Blocks "MODEL S P"

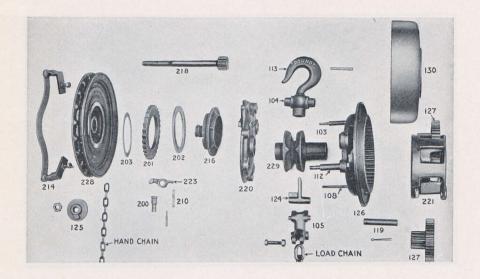


Prices of Repairs for Superior and Triplex Pattern New Model Blocks

List 1	No. NAME	2 Ton	1 Ton	1½ Tons	2 Tons	3 Tons	4 to 20 Tons
104	Top Crosshead	\$1.10	\$1.60	\$2.35	\$2.95		
113	Top Hook	1.85	2.95	3.65	4.40		
119	Gear and Pinion Pins, each	.65	.90	1.10	1.35	\$1.10	\$1.35
125	Check Washer	.65	.90	1.10	1.25	1.10	1.25
127	Gear and Pinion, each		3.30	4.40	5.90	4.40	5.90
133	Lower Swivel Hook	3.65	5.50	6.60	8.80		
200	Pawl Stud	.50	.75	.90	.95	.90	.95
201	Ratchet Disc	1.50	2.00	2.60	2.95	2.60	2.95
202	Leather Disc		1.10	1.45	1.45	1.45	1.45
203	Galvanized Iron Disc		.45	.60	.75	.60	.75
210	Pawl Spring	.15	.25	.30	.30	.30	.30
216	Disc Hub		4.40	6.60	8.10	6.60	8.10
221	Pinion Cage	3.65	5.15	7.35	9.55	7.35	9.55
223	Pawl	.60	.75	.90	.90	.90	.90
	*Load Chain, steel, per foot	.80	.90	1.00	1.10	1.00	1.10
	Hand Chain, steel, per foot	.50	.50	.50	.50	.50	.50
403	Small Separator	.60	.75	.90	1.10	.90	1.10
405	Load Chain Guide		1.45	2.20	2.55	2.20	2.55
408	Load Chain Guide Bolt	.30	.55	.60	.75	.60	.75
412	Large Separator	.95	1.10	1.35	1.45	1.35	1.45
414	Continuous Hand Chain Guide		5.15	7.35	8.80	7.35	8.80
418	Driving Pinion		5.15	7.35	8.80	7.35	8.80
420	Ratchet Case		6.60	8.80	9.55	8.80	9.55
424	Stripper	.50	.50	.75	.90	.75	.90
426	Internal Gear		8.80	12.50	14.00	12.50	14.00
428	Hand Wheel		5.15	7.35	8.80	7.35	8.80
429	Load Sheave		8.80	13.25	14.70	13.25	14.70
430	Gear Cover	2.20	3.30	5.15	5.90	5.15	5.90
432	Steel Plate, each		2.95	4.40	5.50	4.40	5.50
	*XVId-ri lood shoin specify whether or	not h	ook is rea	nired Part	s 429 and	1 221 are	a driven

*When ordering load chain specify whether or not hook is required. Parts 429 and 221 are a driven fit. Additional parts for larger blocks on page 12.

Repair Parts For Superior Spur-Geared Blocks "OLD MODEL"

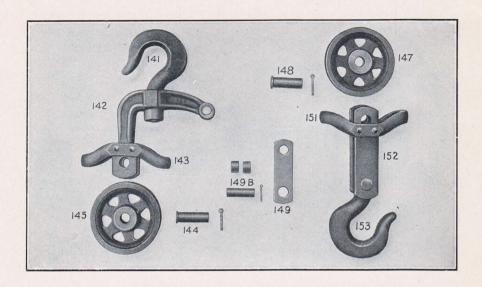


Prices of Repairs for "Superior" and Triplex Pattern Blocks
As shown in above illustration.—Old Model.

List N	No. NAME	½ Ton	1 Ton	1½ Tons	2 Tons	3 Tons	4 to 20 Tons
103	Small Separator	\$0.60	\$0.75	\$0.90	\$1.10	\$0.90	\$1.10
104	Top Crosshead		1.60	2.35	2.95		
105	Load Chain Guide		1.45	2.20	2.55	2.20	2.55
108	Load Chain Guide Bolt		.55	.60	.75	.60	.75
112	Large Separator		1.10	1.35	1.45	1.35	1.45
113	Top Hook and Nut		2.95	3.65	4.40		
119	Gear and Pinion Pins, each		.90	1.10	1.35	1.10	1.35
124	Stripper		.50	.75	.90	.75	.90
125	Check Washer		.90	1.10	1.25	1.10	1.25
126	Internal Gear		8.80	12.50	14.00	12.50	14.00
127	Gear and Pinion, each		3.30	4.40	5.90	4.40	5.90
129	Load Sheave		8.80	13.25	14.70	13.25	14.70
130	Gear Cover		3.30	5.15	5.90	5.15	5.90
133	Lower Swivel Hook		5.50	6.60	8.80		
200	Pawl Stud		.75	.90	.95	.90	.95
201	Ratchet Disc		2.00	2.60	2.95	2.60	2.95
202	Leather Disc		1.10	1.45	1.45	1.45	1.45
203	Galvanized Iron Disc		.45	.60	.75	.60	.75
210	Pawl Spring		.25	.30	.30	.30	.30
414	Continuous Hand Chain Guide		5.15	7.35	8.80	7.35	8.80
216	Disc Hub		4.40	6.60	8.10	6.60	8.10
218	Driving Pinion		5.15	7.35	8.80	7.35	8.80
220	Ratchet Case		6.60	8.80	9.55	8.80	9.55
221	Pinion Cage		5.15	7.35	9.55	7.35	9.55
223	Pawl		.75	.90	.90	.90	.90
228	Hand Wheel		5.15	7.35	8.80	7.35	8.80
	*Load Chain, steel, per foot		.90	1.00	1.10	1.00	1.10
	Hand Chain, steel, per foot		.50	.50	.50	.50	.50

*Specify whether or not hook is required when ordering load chain. Parts 229 and 221 are a driven fit. Additional parts for larger blocks shown on page 12.

Additional Repairs For Superior Spur-Geared Blocks



Prices of Repairs for "Superior" and Triplex Pattern Blocks

As shown in the above illustration. 3 to 10 Tons.

In ordering be sure to specify whether for Old Model or Model S. P.

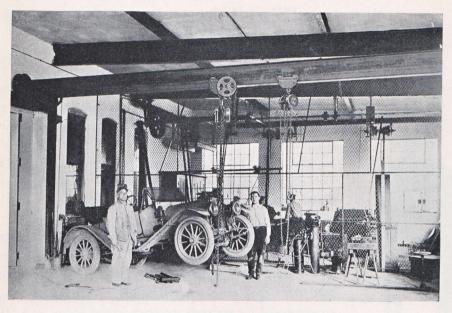
Top Block

		3-Ton	4-Ton	5-Ton	6-Ton	8-Ton	10-Ton
141	Top Hook	\$8.50	\$13.00	\$17.50	\$26.50	\$36.00	\$51.00
142	Top Yoke	20.00	30.00	36.60	45.00	58.00	88.00
143	Top Guard and Guides			10.00	14.00	18.00	22.00
144	Top Sheave Pin			2.00	3.50	4.00	5.00
145	Top Sheaves			6.00	6.00	6.00	8.50

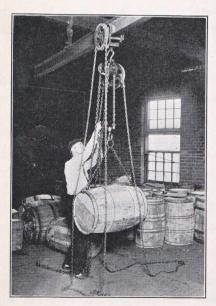
Bottom Block

-							
147	Bottom Sheave	\$6.00	\$6.00	\$6.50	\$6.00	\$6.00	\$8.00
148	Bottom Sheave Pin	1.60	1.80	2.50	4.00	4.50	5.00
149	Becket Straps			8.00	11.00	13.00	14.00
151	Bottom Guards and Guides	8.00	11.00	11.00	14.00	16.00	22.00
152	Bottom Side Plates and Crosshead	7.20	10.00	14.00	23.00	30.00	36.00
153	Bottom Hook	8.00	13.00	17.00	26.00	36.00	160.00

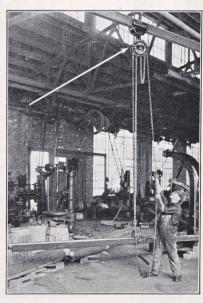
HOISTS - WINCHES - TROLLEYS - CRANES - CHAINS



A "Round" 3 Ton Traveling Crane Equipped with Superior Spur Geared Blocks in a Fire Department Garage.



A 1 Ton Round Improved Screw Hoist on a Geared Steel Plate Trolley in a Shipping Room, easily handles Barrels up to 2000 Pounds



A 1 Ton Superior Block on a Plain Steel Plate Trolley in a Machine Shop enables one Man to lift and move a Ton easily

The Weston Differential Chain Block



The Weston Differential Block is the simplest chain block made and lowest in first cost. For occasional work, and general use about garages, stores, small shops and farms this hoist is satisfactory. Of course, you must be the judge of what your needs demand, but if you do not require the durability and high efficiency of the "Superior" Block or "Round" Improved Screw Hoist you may safely decide on this block.

The Differential Hoist is light and easily carried from place to place. The chain handled in lifting the load compares favorably with the Superior Spur-Geared Block, but it takes more than twice the pull to lift it. Therefore it is not recommended for positions requiring lots of lifting.

The Weston Differential Block holds the load at any point and cannot lower it until the operator pulls the chain back.

The chain is accurate fitting steel chain. The wheels are large, smoothly cast, semi-steel wheels that mesh perfectly with the chain.

The hooks are heat treated, drop forged hooks. The parts throughout are carefully machined and of pleasing design.

Every Differential Block manufactured by us is thoroughly tested before being shipped. You will find them durable and dependable.

These hoists are packed in separate boxes and shipped the standard length lift unless otherwise specified. We can ship special lift hoists promptly.

Weston Differential Chain Blocks

1/4 to 3 Ton Capacity

Capacity	Price Complete	Regular Lift in Feet	Extra Lift Price per Foot*	Minimum Distance Between Hooks
¹ / ₄ ton	\$36.00	6 ft.	\$4.80	17 in.
1/2 "	42.00	7 "	4.80	21 "
1 "	56.00	8 "	5.00	26 "
11/2 "	72.00	81/2 "	5.40	32 "
2 "	90.00	9 "	5.60	39 "
3 "	120.00	10 "	6.00	44 "

^{*}Each foot of extra lift includes 4 feet of chain.

Weight and Pull Required

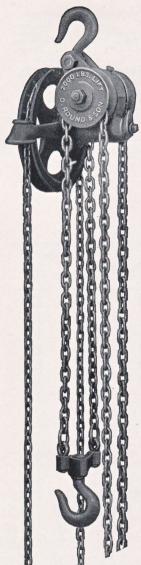
Capacity	Net Weight in Pounds	Gross Weight in Pounds	Size of Packing Case	—Chain Pounds	Regular Chain Lineal Feet	
1/4 ton	24	28	15x 8x 7 in.	72	18	22
1/2 "	31	36	17x10x 7 "	122	24	26
"	51	60	18x12x 8 "	216	30	30
1/2 "	81	94	20x18x 8 "	246	36	33
, "	121	146	25x21x 8 "	308	42	36
3 "	179	204	25x21x12 "	557	38	38

Prices for Repairs

Name of Parts	<u></u>	1/2	Capacity	in Tons—	2	3
Top Sheave Yoke and Hook	\$5.00	\$6.00	\$8.50	\$11.00	\$15.00	\$22.00
Top Yoke and HookSheave	6.25	8.00	12.00	16.80	24.00	31.20
Bottom Sheave	1.80	2.40	3.00	3.80	5.00	7.50
Bottom Yoke and Hook	4.00	5.00	7.00	9.00	12.00	16.00
Top Sheave Pin	.80	1.00	1.00	1.20	1.20	1.40
Bottom Sheave Pin	.60	.80	.80	1.00	1.00	1.20
Regular Chain	26.40	31.20	37.50	44.60	50.40	57.00

We can repair any make of Differential Block.

The Round Improved Screw Hoist



The particular advantage of this type of hoist is its medium cost and easy lifting qualities.

If you do not need the speed of a "Superior" Block but want a moderate priced, dependable, easy working hoist, this is the style to order.

It costs but little more than a Weston Differential Block, but lifts so much easier and takes only one man instead of four that it is in universal use in garages, stores, shops, boats and places where hoisting is to be done economically.

Where head room is limited this type is especially efficient as the room it requires is very small in comparison with other types. For this reason it is widely used for trolley systems and in low buildings.

Round Improved Screw Hoists sustain the load at any point. This is a feature of all Round Hoists.

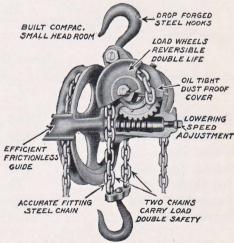
With this type the load is carried on two distinct chains, either of which is strong enough to handle it alone.

The heavy load chain may be removed when the hoist is being put up in a new position. Not all screw hoists have this feature as it is an advantage of Round's improved design.

The operator can remove any twist in the load chain quickly as the load chain swivels in the bottom cross bar.

The load wheels are reversible. This gives them practically double life.

All working parts are enclosed in oil-tight dust-proof case, assuring perfect lubrication.



Sectional View of Round Improved Screw Hoist

Select the size of Round Improved Screw Hoist you think will meet your requirements and we will ship it on thirty-day free trial.

HOISTS - WINCHES - TROLLEYS - CRANES - CHAINS

Prices and Information on Weight, Speed, Reach, etc., of the Round Improved Screw Hoist

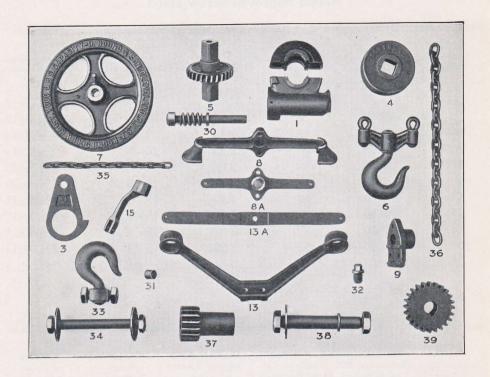
Capacity in Tons	Price Complete	*Regular Lift in Feet	Price of Extra Lift per Foot	†Reach in Feet and Inches	Size of Packing Box in Inches
1/2	\$50.00	8	\$2.40	9- 5	18x15x12
1	60.00	8	2.60	9-6	19x18x12
11/2	80.00	8	2.80	9- 7	23x18x14
2	100.00	9	2.88	10-10	25x21x14
3	150.00	10	3.00	12- 6	32x26x20
4	190.00	10	3.40	12- 8	35x28x20
5	280.00	12	4.40	15- 3	32x20x32
6	360.00	12	5.00	15- 3½	32x20x32
8	420.00	12	5.80	15- 5	32x20x32
10	550.00	12	5.80	15-11	32x20x32

Capacity in Tons	Pull on Hand Chain to Lift Full Load in Pounds	Feet of Chain Handled to Lift Load One Foot	Shortest Distance Between Hooks in Inches	Gross Weight in Pounds	Net Weight of Hoist in Pounds
1/2	49	60.5	17 in.	97	68
1	71	76.0	18 "	103	75
11/2	99	89.5	19 "	144	106
2	129	98.0	22 "	215	160
3	163	98.0	30 "	324	247
4	190	128.0	32 "	419	325
5	293	106.5	39 "	620	480
6	293	110.0	391"	760	550
8	403	148.0	41 "	886	735
10	358	198.0	47 "	972	785

^{*}These figures show the height which blocks furnished with the regular amount of chain will hoist above the level on which operator stands. Can furnish any length hoist desired.

[†]The "Reach" is the sum of the "lift" and the "shortest" distance between hooks or in other words the length of the lift plus the hoist gearing.

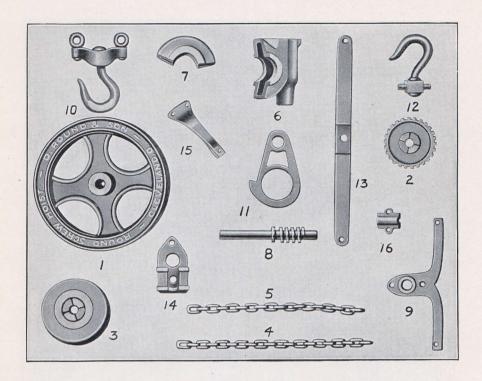
Round Improved Screw Hoist Repairs



Prices of Repairs for Round Improved Screw Hoist as shown in the Above Illustration

No.	Name	1/4	1/2	1	1 1/2	2	3	4	5	6	8	10 Tor
1	Gear Case	\$5.50	\$6.00	\$7.00	\$8.00	\$11.00	\$19.00	\$22.00	\$32.00	\$32.50	\$40.00	\$52.00
3	Frames (2)	1.50	1.70	2.50	3.50	6.00	8.00	12.00	20.00	24.00	28.00	
4	Load Wheels (2)		5.00	6.00	7.00	9.50	12.00	17.00	20.50	30.00	36.00	40.00
7	Worm Gear		6.00	9.50	11.00	16.50	14.00	18.00	32.00	33.00	60.00	60.00
6	Bottom Hook	5.00	6.00	6.50	7.00	9.30	13.00	16.50	25.20	31.00	34.00	50.00
	Hand Wheel		5.00	5.00	6.50	10.00	13.00	17.00	22.00	24.00	24.00	24.00
	Hand Chain Guides	3.00	5.00	5.00	6.00							
						4.00	6.00	7.00	10.00	10.00	13.50	16.00
-	Gland					5.00	5.50	6.00	8.00	14.00	16.00	16.00
13				.70	.70	.70	.70	.70	.70	.70	.70	.70
	Drop Guides	4.50	5.00	6.00	7.00	9.50	13.00	14.00	24.00	24.00	32.00	32.00
30	Worm	.40	.40	.40	.50	.60	1.00	1.00	2.00	2.00	2.00	2.00
31	Thrust Washer	.60	.80	.80	1.00	1.20	3.00	3.00	4.00	4.00	4.00	4.00
	Thrust Screw		4.00	5.50	7.50	8.50	11.00	22.00	27.00	40.00	46.00	70.00
33	Top Hook						11.00	3.00	5.00	5.00	6.00	6.00
	Center Bolt		.60	.60	.60	.70	.70	.80	1.00	1.00	1.00	1.00
35	Hand Chain, per ft			.96	1.12	1.30	1.40	1.60	2.00	2.76	3.00	3.24
36	Load Chain, per ft		.84						2.00	2.70	10.00	14.00
	Pinion										6.00	6.00
38	Stud										10.00	14.00
39	Gear		10.00	10.00	10.00	11.00	15.40	19.20	26.00	26.00	26.00	26.00
	Complete Hand Chain		10.20	10.20	10.80	14.00			83.26	111.04	121.00	143.95
	Complete Load Chain	17.60	21.74	24.50	27.92	36.60	44.68	54.90	03.20	111.04	121.00	140.70

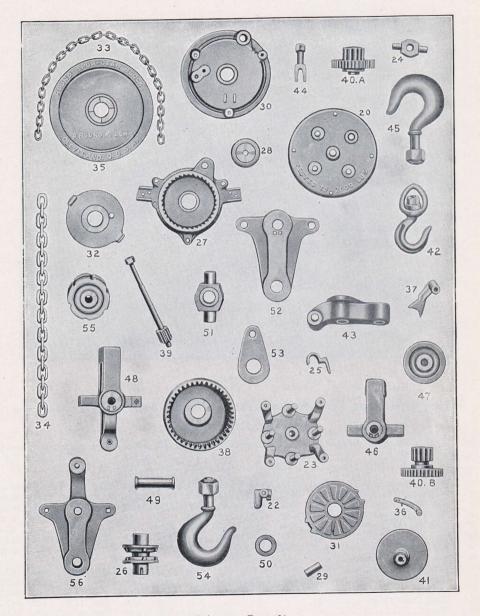
Old Style Pattern Screw Hoist Repairs



Prices of Repairs for Old Style Pattern Screw Hoist as shown in the Above Illustration

List I	No. Name	1/4	1/2	1	1 1/2	2	3	4	5	6	8	10
1	Hand Wheel	\$3.00	\$5.00	\$5.00	\$6.50	\$10.00	\$13.00	\$17.00	\$22.00	\$24.00	\$24.00	\$24.00
2	Worm Gear	12.00	6.00	9.50	11.00	16.50	14.00	18.00	32.00	33.00	60.00	60.00
3	Load Wheels (2)	4.50	5.00	6.00	7.00	9.50	12.00	17.00	20.50	30.00	36.00	40.00
4	Hand Chain, per ft	.50	.60	.60	,60	.70	.70	.80	1.00	1.00	1.00	1.00
5	Load Chain, per ft	.70	.84	.96	1.12	1.30	1.40	1.60	2.00	2.76	3.00	3.24
6&7	Cap and Case	5.50	6.00	7.00	8.00	11.00	19.00	22.00	32.00	32.50	40.00	52.00
8	Worm Screw	4.50	5.00	6.00	7.00	9.50	12.00	14.00	20.00	28.00	38.00	40.00
9	Hand Chain Guide	2.40	3.00	4.50	6.00							
10	Bottom Hook and Swivel	5.00	6.00	6.50	7.00	9.30	13.00	16.50	25.20	31.00	34.00	50.00
11	Frames (2)	.70	1.50	2.50	3.50	6.00	8.00	10.28	14.00	24.50	28.00	32.00
12	Top Hook and Swivel	3.50	3.90	4.26	4.76	7.06	10.00	12.50	21.72	25.00	27.00	38.00
13	Hand Chain Guide					3.00	4.00	6.00	8.00	14.00	14.00	14.00
14	Gland					4.00	5.00	6.00	7.50	10.12	13.50	16.00
15-16	Drop Guide	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70

Repairs for the Round Spur-Geared Block

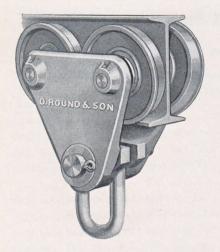


Prices on Page 21

Prices of Repairs for Round Spur-Geared Block

As shown in illustration on page 20

Number		100				Capaci	tv of I	Blocks	in Ton	IS				
of part	1/4	1/2	1	11/2	2	21/2	3	4	5	6	8	10	12½	15
20	\$3.60	4.32	6.48	9.00	10.80	12.96	9.00	10.80	12.96	10.80	12.96	12.96	12.96	12.96
22	.72	.96	1.32	1.44	1.80	2.04	1.44	1.80	2.04	1.80	2.04	2.04	2.04	2.04
23	5.40	6.36	7.92	9.60	11.76	14.40	9.60	11.76	14.40	11.76	14.40	14.40	14.40	14.40
24	1.44	1.80	2.16	2.76	3.48	3.96								
25 Per pair	.72	1.08	1.08	1.44	1.44	1.80	1.44	1.44	1.80	1.44	1.80	1.80	1.80	1.80
26	5.76	6.12	7.56	10.68	.13.68	16.20	10.68	13.68	16.20	13.68	16.20	16.20	16.20	16.20
27	4.32	4.92	5.76	7.92	12.60	17.64	7.92	12.60	17.64	12.60	17.64	17.64	17.64	17.64
28 '	.72	.96	1.32	1.80	2.40	2.88	1.80	2.40	2.83	2.40	2.88	2.88	2.88	2.88
29 Each	.24	.24	.24	.36	.36	.36	.36	.36	.35	.36	.36	.36	.36	.36
30	4.32	5.40	6.48	8.52	10.44	12.60	8.52	10.44	12.50	10.44	12.60	12.60	12.60	12.60
31	1.80	2.52	3.12	3.48	3.96	4.56	3.48	3.96	4.56	3.96	4.56	4.56	4.56	4.56
32	1.80	1.80	2.40	3.60	4.92	6.12	3.60	4.92	6.12	4.92	6.12	6.12	6.12	6.12
33 Per foot	.60	.60	.60	.70	.70	1.00	.70	.70	.80	.70	.80	.80	1.00	1.00
34 Per foot	.90	1.00	1.10	1.20	1.30	1.40	1.30	1.30	1.50	1.30	1.40	1.40	1.40	1.40
35	6.36	6.84	8.64	10.80	12.60	18.00	10.80	12.60	18.00	12.60	18.00	18.00	18.00	18.00
36	.36	.48	.60	.72	.96	1.08	.72	.96	1.08	.96	1.08	1.08	1.08	1.08
37	.72	.96	1.08	1.32	1.44	1.80	1.32	1.44	1.80	1.44	1.80	1.80	1.80	1.80
38	4.32	4.92	5.64	6.1,2	8.16	10.68	6.00	8.16	10.68	8.16	10.68	10.68	10.68	10.68
39	5.04	6.00	6.96	9.00	14.40	18.00	9.00	14.40	18.00	14.40	18.00	18.00	18.00	18.00
40A Each	4.68	5.40	6.72	9.00	11.76	14.40	9.00	11.76	14.40	11.76	14.40	14.40	14.40	14.40
40B Fach	4.68	5.40	6.72	9.00	11.76	14.40	9.00	11.76	14.40	11.76	14.40	14.40	14.40	14.46
41	2.76	3.24	4.20	4.68	5.76	7.20	4.68	5.76	7.20	5.76	7.20	7.20	7.20	7.20
12	2.88	5.76	8.28	11.52	13.68	16.20								
43			3.12		3.48		3.96	4.68	5.64	9.00	13.20	15.36	27.00	27.00
14			1.08		1.32		2.04	2.16	2.40					
15	1.80	2.40	3.60	4.20	4.80	6.00	6.60	8.16	10.80	12.60	14.40	21.60	28.80	36.00
16&48							1			6.36	9.24	11.16	13.56	16.20
17										4.56	5.04	5.28	9.00	9.00
19			.24		.36		.36	.60	.72	.72	.72	.96	1.08	1.44
50			.24		1.08		1.08	1.32	1.44	1.80	2.04	2.16	2.40	2.76
51			2.40		2.88		3.24	3.84	4.20	4.56	5.28	5.64	6.12	6.12
52&56			1.32		1.80		2.16	3.12	4.56	6.12	9.00	13.32	14.40	14.40
4					3.24		6.12	8.16	10.80	12.60	14.40	21.60	28.80	36.00
55			2.40				3.96	4.32	5.28	4.32	6.12	7.68	9.00	10.80



Cast Iron Trolleys

Our Cast Iron Trolleys were designed to meet the demand for a low priced four wheel I-Beam Trolley. They are substantially built and while not recommended for continuous service they will be found a very satisfactory trolley for the price.

Of course for hard service and greatest economy we recommend the Steel Plate Trolley shown on page 23.

Prices of Cast Iron Trolleys

Capacity in Tons	List Price	Size of I-Beam	Smallest Radius Curve	Net Weight Pounds
1/4	\$12.00	4 in.	19 in.	16
1/2	16.00	5 "	22 "	28
72	21.00	6 "	22 "	45
11/2	27.00	7 "	31 "	67

"Round" Plain Rail Trolleys



This is the simplest trolley system made. It is particularly useful where the lateral travel is short and the load light.

These Trolleys are strongly made and have steel plate sides. Wheels are made as large as average conditions have been found to permit.

Flat or Plain Rail Trolley Systems are not, of course, as satisfactory as I-Beam systems for all purposes. It has the advantage, however, in being easy to erect and the rail may be easily bent for curves.

Prices of Plain Rail Trolleys

Size of Rail	Distance Between Hangers	Price
3x½ in.	6 ft.	\$24.00
3x1/2 "	5 "	24.00
	6 "	48.00
	5 "	48.00
	4 "	48.00
6x1 "	6 "	80.00
	Rail 3x½ in. 3x½ " 4x¾ " 4x¾ " 4x¾ "	Size of Between Hangers 3x ½ in. 6 ft. 3x ½ " 5 " 4x ¾ " 5 " 4x ¾ 4 " 4 " 4 " 4 " 6 "

Net price quoted on hangers.

Steel Plate Trolleys

Used in Connection with Chain Blocks for Moving Loads

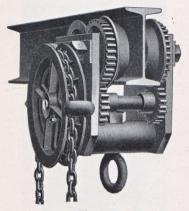


Fig. 19

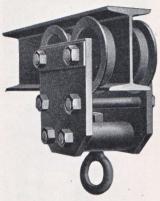


Fig. 20

The best method of lifting and moving loads weighing about 500 pounds or more in garages, foundries, machine shops and shipping departments, is by using an overhead I-Beam with Trolley and Chain Hoist running on it.

Floor trucking, compared with this modern, speedy, convenient method of transportation, is extremely costly because of the floor space required in operating and the labor involved. An I-Beam Trolley is up out of the way, requires no floor space and one man can do the work of four.

Round Steel I-Beam Trolleys are made in both plain and geared types, and in all capacities from one

For heavy loads (3-ton and over) the geared trolley should be used. Light loads can be handled more efficiently by the plain trolley.

The four wheels on each trolley are straight faced and set at an angle so there is no grinding action as the trolley travels on the beveled edge of the I-Beam track.

Heavy steel pins support these wheels, they run on roller bearings in all sizes. The equalizing cross bar connecting the two halves of the trolley may be taken out and trolley adjusted to I-Beam at any point. Another feature is the construction of the whole trolley in relation to this cross bar so that the load is evenly distributed, thereby maintaining the most important essential—safety.

Prices of I-Beam Trolleys. (Four Wheeled Steel Plate)

	For Standard Light Section	Plain	Geared	—-Weight i	in Pounds-
Capacity	I-Beam	Fig. 20	Fig. 19	Plain	Geared
1000 lbs.	6 in.	\$35.00	\$60.00	65	100
2000 "	6 "	40.00	70.00	70	110
3000 "	7 "	50.00	76.00	75	125
4000 "	8 "	56.00	80.00	85	135
6000 "	9 "	66.00	94.00	90	165
8000 "	10 "	74.00	104.00	150	220
0000 "	12 "	86.00	130.00	180	240
2000 "	15 "	110.00	160.00	235	325
6000 "	20 "	140.00	190.00	290	390
20000 "	24 "	170.00	220.00	330	420

Can be furnished to fit any size I-Beam. State size and width of lower flange on special I-Beams. Trolleys for larger than standard I-Beams are at an additional price on application.

Combined Trolleys and "Superior" Blocks





The usefulness of a "Superior" Block is increased many times by attaching it to an overhead trolley of either the plain or geared type.

This makes it possible to lift a load and transport to any position desired.

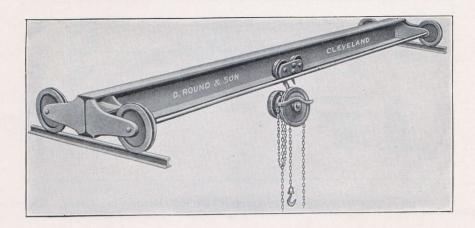
Warehouses, store rooms, small shops, etc., find this system of great usefulness. Every available foot of space may be utilized in storing away boxes, barrels, etc., as this system operates easily where the head room is very limited. Special clevis devices are used for attaching "Superior" Blocks to trolleys in such instances. Where head room saving is not necessary the use of regular hooks provided means greater convenience in detaching the block.

Prices and Information on Plain and Geared Trolleys and "Superior"
Blocks with Clevise Connections

Capacity in Tons	Standard Sizes of I-Beam	Regular Hoist in *Feet	With Plain Trolley	With Geared Trolley	Minimum Distance from Bottom of I-Beam to Inside of Lower Hook
1/2	5 in.	8	\$110.00		13 in.
1	6 "	8	140.00	\$180.00	17 "
11/2	7 "	8	180.00	230.00	20 "
2	8 "	9	210.00	275.00	21 "
3	9 "	10	260.00	320.00	34 "
4	10 "	10	320.00	400.00	38 "

^{*}For price of Extra Long Hoist Chains with Plain Trolley see Regular "Superior" Block, page 8. Extra Hoist with geared trolley, same price as extra hoist for "Superior" Block plus \$1.00 a foot.

Single I-Beam Traveling Cranes



The construction of the above illustrated apparatus permits of their use in places where head-room is limited as in warehouses, also in stone yards, loading yards and in large or small machine shops and foundries.

This equipment consists of a Single I-Beam Traveler carrying a "Superior" High Speed Hoist. The traveler is mounted on a substantial truck frame equipped with wheels for use on a "T" rail or on a steel channel rail, whichever is specified. Ordinarily the "T" rail is used. It is usually spiked securely to timbers bolted to walls or supported by posts.

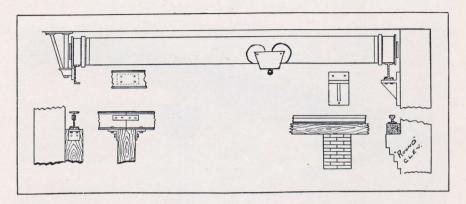
The advantages of such equipment are self evident by the convenience, speed and labor saving it effects in transporting material from point to point. Owing to the simple construction it is quickly erected and easily operated.

Prices of Single I-Beam Trolleys with Superior Block

Price for 10-Foot Span and Less	Additional Price per Foot up to 25 Feet	Height of Track for Hoist Furnished	Extra Lift per Foot Additiona Height
\$200.00	\$6.00	9 ft.	\$1.80
310.00	8.00	9 "	1.90
360.00	12.00	10 "	2.00
440.00	14.00	11 "	2.10
530.00	16.00	13 "	3.00
	\$200.00 \$10.00 \$60.00 \$440.00	10-Foot Span and Less Price per Foot up to 25 Feet \$200.00 \$6.00 310.00 \$.00 360.00 12.00 440.00 14.00	10-Foot Span and Less Price per Foot up to 25 Feet for Hoist Furnished \$200.00 \$6.00 9 ft. 310.00 8.00 9 " 360.00 12.00 10 " 440.00 14.00 11 "

It is necessary in ordering to give the span from centre to centre of rails and to show section of rail.

Information for Installing Cranes



Here is an illustration showing different ways to install Hand Power Cranes. To guide you in planning your runway we have compiled the following table of specifications.

Ţ	Jsing Steel Char	nnels	Using Tee Rails						
Capacity in Tons	Size of Channel	Greatest Distance Be- tween Supports	Size of Tee Rail	Spike to Yellow Pine	Greatest Distance Between Pos Supports				
1/4	6 in.	10 ft.	2½x16	6x6	12 ft.				
1/2	7 "	10 "	2½x16	6x6	10 "				
1	8 "	10 "	2½x16	6x8	10 "				
11/2	10 "	10 "	$2\frac{1}{2}x20$	8x8	10 "				
2	12 "	10 "	$2^{1/2}$ x20	8x10	12 "				
3	15 "	14 "	2½x20	10x10	12 "				

Information for Installing I-Beams

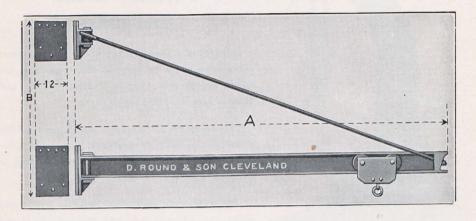
The I-Beams are usually purchased locally but we will be glad to give you price if desired and also on necessary hangers. Please specify drop from ceiling. Use the table below to figure out size of I-Beam and number of supports required.

Maximum Distance in Feet Between Supports

Size I-Beam Inches	1/2	1	11/2	2	3	4	5	6	7	8	10 Tons
5	14										
6	17	13									
7	23	18	15								
8	24	20	17	15							
9		24	20	18	14						
10		27	24	21	17	14	12				
12			30	26	22	19	17	15	13		
15				32	27	24	22	19	17	16	
20								33	31	30	26
24										37	33

Swinging Bracket Jibs

Complete with Trolleys



For erecting, assembling and handling various kinds of work this equipment enables one man to do the work accurately. It materially increases the utility of Chain Blocks.

The Chain Block raises the load, the jib swings it into position, the trolley then moves it along the beam until the desired position is reached.

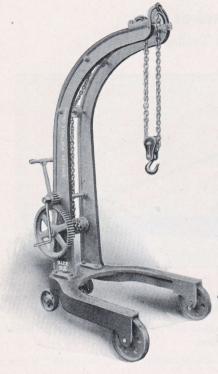
Putting this equipment in operation is a very simple matter for any workman. It can be done quickly.

Prices of Swinging Jibs with Wrought Iron Trolley

Capacity	Dir	nensions		Price with Wrought
in Tons	A	В	Size I-Beam	Iron Trolley
1	12 ft.	5 ft. 3 in.	8 in.	\$170.00
1 .	14 "	5 " 3 "	8 "	180.00
1	17 "	6 " 3 "	8 "	190.00
2	12 "	5 " 3 "	8 "	180.00
2	14 "	5 " 3 "	8 "	190.00
2	17 "	6 " 3 "	9 "	200.00
3	11 "	6 " 3 "	9 "	210.00
3	15 "	6 " 3 "	9 "	220.00
3	17 "	7 " 4 "	10 "	250.00

See previous pages for price on Chain Blocks.

Hinge plates bored free if sketch is furnished showing location desired, otherwise not bored.



Simplex Portable Crane and Hoist

In parts of a shop, garage or warehouse where a traveling crane or other overhead methods are not practical this Simplex Portable Crane and Hoist solves the handling problem.

This equipment is made of the highest quality material according to practical plans, which insures it getting the load where it is wanted in the least time with the least effort.

One man, with a Simplex Portable Crane and Hoist, can lift two tons and transport it to any convenient part of your shop.

This Crane is very compact and takes up but little space when not in use.

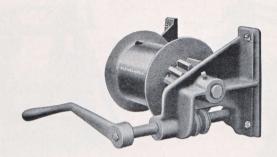
Prices of Simplex Portable Crane and Hoist

Size	Capacity in Tons	Price	Height of Crane	Height of Hoist	Overhang	Weight Pounds
91	11/2	\$100.00	6 ft. 4½ in.	5 ft. 3 in.	2 ft. 4½ in.	665
91L	11/2	100.00	6 " 41/2 "	5 " 3 "	2 " 4½ "	660
92	2	112.00	7 " 10 "	6 " 8 "	2 " 71/2 "	790
93	2	112.00	7 " 10 "	6 " 8 "	2 " 7½ "	785
94	21/2	125.00	8 " 4 "	7 " 3 "	2 " 8½ "	1000
95	21/2	125.00	8 " 4 "	7 " 3 "	2 " 8½"	1000

Bed Dimensions

Size	Outs		of Bed		side		Length of Bed		Heig of B	
Size	Outs	ide		1113	side		or bed			
91	2 ft.	8 in.	2	ft.	1/2 in.	3 f	t. 2	in.	12	in
91L	2 "	8 "	. 2	"	1/2 "	3 "	7	"	63/8	"
92	2 "	10 "	2	"	21/2 "	3 "	5	"	12	"
93	3 "	3 "	2	"	4 "	3 "	10	"	63/8	"
94	3 "	2 "	2	"	61/2 "	3 "	10	"	12	46
95	3 "	8 "	2	"	9 "	3 "	10	"	61/2	"

Safety Wall Winch



This Safety Wall Winch is designed to meet the demand for a safe, compact, fast lifting winch.

It is small and compact enough to be easily handled and carried. Yet it is powerful enough to safely work to its rated capacity.

This winch is worm-geared, making it impossible for the load to run down of its own accord. Both raising and lowering are under control of the crank or handle.

They are just the thing for raising and lowering heavy electric light fixtures in churches and public buildings.

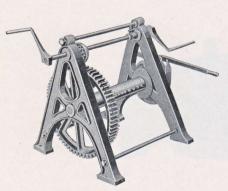
They are universally used in automobile repair shops, machine shops, etc. In fact are handy in numerous places where simplicity combined with strength is required.

Prices of Safety Wall Winch

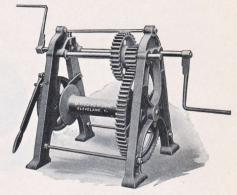
Capacity	Drum	Price	Weight
500 lbs.	5½x6 in.	\$20.00	45 lbs.
750 "	5½x6 "	25.00	65 "

Iron Hoisting Crabs and Winches

For Manila Rope, Wire Rope or Chain



Single Purchase Type



Double Purchase Type

These Crabs or Winches are quality built and constructed for heavy duty work. Every part is carefully machined. They may be operated by power where a shafting is accessible by fitting them with a tight and loose pulley. No extra charge for lengthening handle shaft for this purpose. All Round Winches are fitted with dogs and ratchets to keep load from running back.

Prices of Double Purchase

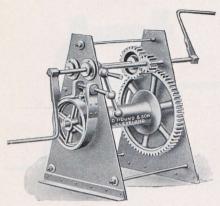
	Number—						
10	11	12	13	14	15	16	17
Capacity, tons* 4	5	6	9	12	15	18	24
With Brake, each\$80.00	\$92.00	\$118.00	\$138.00	\$164.00	\$225.00	\$280.00	\$360.00
Without Brake, each 70.00	80.00	100.00	120.00	146.00	205.00	252.00	320.00
Length and Diameter of Drum, inches 18x5	22x6	22x6	26x6	26x6	30x6	30x6	30x6
Approximate Weight, lbs 400	450	600	800	1020	1270	1325	1350

Prices of Single Purchase

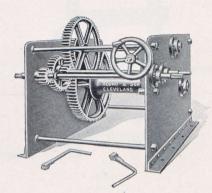
	Number4					
	1	2	3	4	5	6
Capacity, tons*	. 2	3	4	5	6	9
With Brake, each	\$54.00	\$60.00	\$70.00	\$80.00	\$104.00	\$125.00
Without Brake, each			58.00	70.00	88.00	106.00
Length and Diameter of Drum, inches	13x5	18x5	18x5	26x6	30x6	30x6
Approximate Weight, pounds	260	330	400	500	600	635

^{*}Capacities based on using 2 and 3 sheave blocks in connection. Will lift one-fifth direct from drum without blocks.

Wrought Iron Crabs







Treble Purchase Crab

This wrought iron hoisting crab has wrought iron sides and a screw brake.

Owing to its construction this crab is preferred by contractors and others who ship their equipment from place to place. It stands rough usage and is economical for its type. Can be purchased without delay in any size.

Prices of Wrought Iron Crab

Add 50 percent to prices shown on page 30.

If screw brake is wanted add 5 percent to price of crab with brake.

Treble Purchase Crab

This type of crab is made to lift direct from the barrel 6, 8, 10, 12 and 15 tons.

It is especially designed for Contractors, Railroads and others who require heavy equipment.

The sides are wrought iron with cast iron bosses and reinforced with angle iron along the bottom.

The gears are well made, properly proportioned, truly bored and keyed to their respective shafts.

Shafts are of wrought iron, turned to receive wheels and for bearings. Tie rods are of wrought iron. Each crab has powerful screw brake.

Brass bushings cost extra.

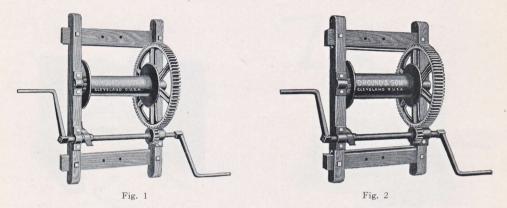
These crabs are made in various sizes of barrels up to 24-inch diameter to carry either hemp, wire rope or chain. These crabs are always made to order.

Prices on Treble Purchase Winches

Size	Capacity Direct from Drum	Price
106	12000 lbs.	\$600.00
108	16000 "	700.00
110	20000 "	1100.00
112	24000 "	1300.00
115	30000 "	1700.00

CLEVELAND. SON.

Derrick Winches



These winches are very simple yet extremely strong and very well made, having only the highest grade materials in their parts. The frames are of either seasoned oak or maple and substantially constructed to withstand the strain.

You will find them durable. Usually used in stone quarries, for loading cars, masonry work, etc.

The iron sections may be purchased for assembling to suit your particular needs. Information and prices given on request.

Winch shown in Figure 1 is the light weight type. It is cheaper than heavy type shown in Figure 2 and has much lighter gearing, frames and construction throughout. We recommend the heavy type for most jobs as it will be found cheaper in the long run.

Prices of Derrick Winches

Light Derrick Winches (Fig. 1)-All Single Geared

Ordering Size	Kind of Rope	Diameter of Drum	Length of Drum Between Flanges	Load for Two Men	Load for Two Men Single Block	Price	Weight in Pounds
AAA	Manilla	6	16	1500	3000	\$58.00	280
AA ·	"	6	16	1700	3400	60.00	290
A	"	6	21	1700	3400	60.00	295
R	. 66	6	26	1700	3400	64.00	359
Č	44	6	30	1700	3400	66.00	390
D	Wire	9	16	1200	2400	60.00	342
E	"	9	21	1200	2400	64.00	428

Heavy Derrick Winches (Fig. 2) Single Geared (Per Cut)

00 000 000	No. Capacity, Using 2 and 3 Sheave Block	of Drum Price in I	eight ounds
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	27 28 2½ ton 4 ton	6 x 22 \$70.00 6 x 26 90.00	235 290

29	4 ton	6 x 26	\$100.00	385
29B	8 ton	6 x 28	140.00	500
49D	0 1011	0 X 20	140.00	500

Strap Hand Brakes, extra, \$10.00

Derrick Winches

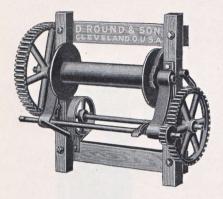


Fig. 3

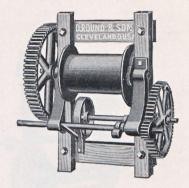


Fig. 4

Double Purchase Types

The outstanding feature of all Round Winches of the double purchase type is their design, permitting them to be thrown into "single gear" when light quick work is to be performed.

Both of the above winches are fitted with strap brakes for rapidly lowering load.

The drums are made for wire or hemp rope.

Prices of Double Purchase Derrick Winches

Size No.	Dimensions of Drum	Dimensions of Main Gears	Price
30 Manilla	5½x22 in.	20x2½ in.	\$120.00
31 "	6 x30 "	24x2½ "	150.00
32 Wire	8 x16 "	20x2 ¹ / ₂ "	120.00
33 "	10 x18 "	24x2½ "	150.00
34 Manilla	6 x30 "	26x3 "	180.00
35 Wire	10 x18 "	26x3 "	180.00

Derrick Winches

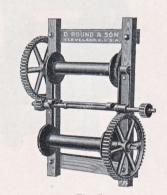


Fig. 5

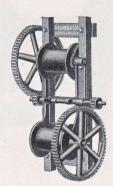


Fig. 6

These winches are single purchase double drum type.

They are especially designed to handle both the Boom of the Derrick and the load.

Very efficient for light, quick work. Either wire or manilla rope.

Each drum operates independently and the load can be held on the drum that is not being operated if desired.

Prices of Derrick Winches

Size No.	Dimensions of Drum	Dimensions of Main Gears	Price	Weight in Pounds
40 Wire	8 x16 in.	24x2½ in.	\$120.00	550
41 "	10 x18 "	30x2½ "	140.00	700
42 Manilla	5½x22 "	24x2 ¹ / ₂ "	120.00	550
43 "	6 x30 "	30x2½ "	140.00	700

Derrick Winches

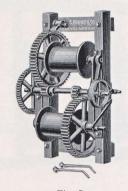


Fig. 7



Fig. 8

These winches are double purchase, double drum type.

Adapted to handle heavy loads. Their capacity is ample for the uses they may be put to. Because they are well built, they are exceptionally powerful and durable.

Prices of Derrick Winches

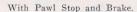
Size No.	Dimensions of Drum	Dimensions of Main Gears	Price	Weight in Pounds
50 Wire	8 x16 in.	24x2½ in.	\$150.00	725
51 "	10 x18 "	24x2½ "	180.00	800
52 Manilla	5½x22 "	24x2½ "	150.00	725
53 "	6 x30 "	24x2½ "	180.00	800

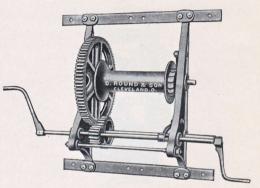
Derrick Pole Winch

This winch is designed for single or double poles. The double pole type is always shipped unless otherwise ordered. No. 20 is single geared, while all others are double as illustrated. Specify number and capacity when ordering.

Prices of Derrick Pole Winches

No.	Capacity with Sheaves	Capacity Direct	List Fitted with Brake
20	1 ton	½ ton	\$70.00
21	2 "	1/2 "	90.00
22	5 "	1 "	130.00
23	8 "	11/2 "	180.00
24	10 "	2 . "	220.00
25	12 "	21/2 "	240.00
26	15 "	3 "	280.00





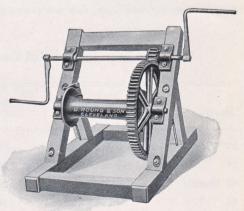
Inclined Winch

The inclined winch illustrated is made in both single and double gear types. The single gear is illustrated.

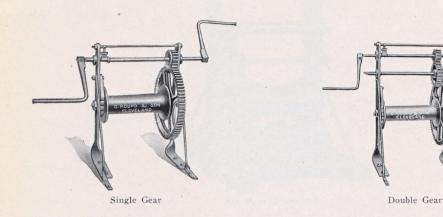
Prices of Inclined Winch, Single Gear

No.	Capacity	Dia. and Length of Drum	Price
55	$2\frac{1}{2}$ ton	6x22	\$80.00
56	4 "	6x26	100.00
	Double	Geared	
57	Double 4 ton	Geared 6x22	\$112.00

Strap Hand Brakes, extra, \$10.00. Concave Drum at 5 per cent extra.



Dray Winches



These dray winches are especially adapted to small trucks and wagons. This design is the regular type. Special requirements are filled whenever possible. As to sizes there is no limit. Larger or smaller sizes made as ordered. Write us for details and prices. They can be furnished with brake if preferred.

No. 46	Single Geared Dray Winch	Capacity 2 tons
No. 47	Double Geared Dray Winch	Capacity 4 tons

Concave Drums

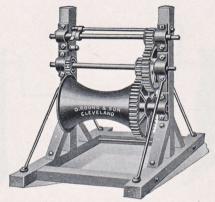


When a larger amount of rope than a straight drum will carry is to be wound on a winch we recommend a Concave Drum. Take several wraps around the drum and then allow the rope to unwind off the drum in the back as it winds on the front. Furnished at 5% extra on any winch if so ordered or sold separate.

Extra Gearing, Shafts, Etc.

We will gladly quote on all necessary iron parts when customer desires to make the frame to suit his individual requirements.

Dray Winches



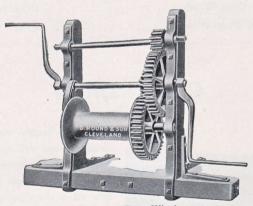
Portable Dray Winch

The capacity of this double purchase winch is based on using two and three sheave blocks. It will lift one-fifth direct from drum without blocks.

Illustration shows concave drum. Can be fitted with straight drum if desired.

Price of Portable Dray Winches

No.	Capacity	Size Drum	Price	Weight
45	7 ton	$4\frac{1}{2}$ x12 in.	\$110.00	350 lbs.



Stationary Dray Winch

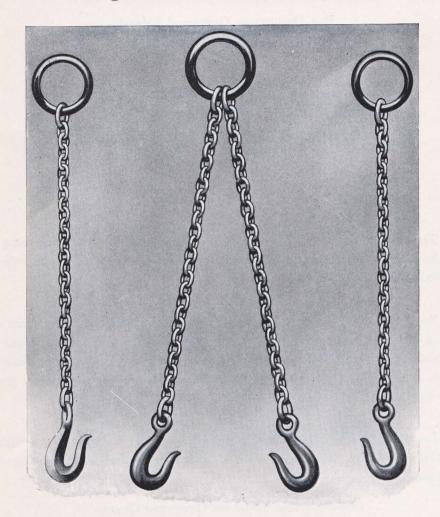
For trucks or wagons this is a very satisfactory type. The frame is reinforced with wrought iron forgings where necessary to make it durable and dependable. They are furnished ready to attach.

Price of Stationary Dray Winch

No.	Capacity	Size Drum	Price	Weight
48	5 ton	6x21 in.	\$125.00	375 lbs.

Spread between boxes, 28 in.

Sling Chains, Double and Single



We are prepared to furnish any style sling chains you require. The above illustration shows three of the most popular styles. The one on the left is a single sling chain with ring on one end and grab hook on the other end. The one in the center is a double sling chain equipped with ring in center and slip hook on each end. The one on the right is a single sling chain with ring on one end and slip hook on other.

The chain used is of our highest grade Sterling Dredge chain described in detail on pages 40 and 41.

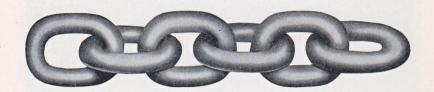
We do not carry these in stock but make them up any weight and any length desired with special pear shaped links or rings on the end and any style grab or slip hooks.

You will be thoroughly pleased with the high grade workmanship on sling chains purchased here for we have had years of experience and understand just what is required.

Write for prices giving the length and style desired and the weight you wish to lift and we will design the chain for your work, quoting net prices.

Sterling Dredge Chain

For Dangerous Overhead Lifting



To many people a chain is a chain. They trust anything that comes along in the chain line. Too often there is a rude awakening when one breaks and somebody is killed but then it is too late.

Buy chain carefully. Look first to the reputation of the maker. If you are not dealing with the manufacturer insist on getting Dredge Chain. That is the name of the quality you should have for overhead lifting. It gets you away from Common Chain, or BBB Chain, which is only two grades better, and puts you into the grade you can trust.

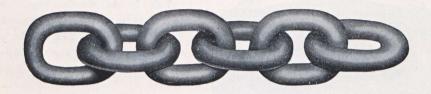
Insist on STERLING Dredge Chain and you will get the finest chain produced for dangerous lifting. We have made it for over 50 years and cannot recommend it too highly for

Handling Hot Metal on Overhead Cranes
Structural Steel Lifting
Crane Chain and "Safety First" uses.

Our workmen are veterans in the chain line. Many of them have been in our employ a life time. You will not be disappointed with their product. See test table on next page.

Sterling Dredge Chain

For Perilous Places



A Few Points Every User of Chains Should Know

Buy your chains a little larger than seems necessary. They will last much longer. Chains should be inspected often and worn links replaced with new ones. Annealing occasionally adds to the life of a chain. To anneal a chain, heat to a cherry red and allow it to cool slowly.

Oiling is good for chains subject to severe usage. Chain is proof-tested to about one-half the breaking strain, but it should not be used for more than two-thirds of the proof test. Hooks and rings will appear clumsy and out of proportion to the chain if made to equal the strength of the chain. A hook three times as large as the chain is none too heavy. For example, $\frac{1}{2}$ -inch chain could take a hook made of $\frac{1}{2}$ -inch iron. Do not use a chain which has stretched or stiffened. It will break without further warning. Insist upon a test certificate with every chain you buy. Over fifty years' experience backs Round Chains.

Average Weight and Test Applied

Size Inches	Average Weight per Foot	Test Tons	Size Inches	Average V per Fo	Veight ot	Test Tons
1/4	11 oz.	3/4	3/4	6 11	0.	81/2
5/16	1 lb.	11/2	13/16	7 "		101/2
3/8	11/2 "	2	7/8	8 "		12
7/16	2 "	21/2	15/16	9 "		14
½ %16	31/2 "	3½ 4½	1	10½ "		16
5/8	41/4 "	51/2	11/8	13 "		20
11/16	5 "	61/2	11/4	16 "		26

(We recommend two-thirds of the test applied as the safe working strain.)

Barrel Chains



Style A

By all means lift your barrels with barrel chains and chain hoists. One man can do the work and do it easier and safer than two or three men without.

With a Round Chain Hoist, a Barrel Chain and a Trolley you can quickly and safely pick up and convey your heaviest barrels to any point. The two types of barrel chains illustrated here have been in successful use for years.

Style B Barrel Grabs

If one end of a filled barrel is open or for any other reason you desire to raise the barrel in an upright position this is the style to use.

PRICE \$14.00

Style A Barrel Chains

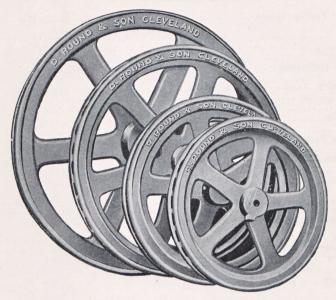
This is the popular type. Strong enough to carry any weight the ordinary barrel will hold. The chains adjust themselves quickly to any size barrel.

PRICE \$6.00



Style B

Chain Wheels



We carry a large stock of chain wheels which makes it possible for us to furnish them promptly. Sizes from 5 inches to 36 inches in diameter.

Information and Prices

No.	Outside Diam. Inches	Size Chain	Number Pockets	Diam. Hub	Length Hub	Price per. Wheel	Price Chair per Foot
B1	5 3/4	17	8 .	21/2	13/4	\$3.00	\$0.60
A2	1112	* I /	19	1 1/2	17/8	5.00	.60
A3	141/4	*1/	24	13/4	15/8	6.50	.60
13	18	* 17	31	2 4	21/4	10.00	.60
16	201/2	* 1/.	36	23/8	2.5/8	13.00	.60
32	5 1/2	5	6	21/2	2	3.00	.80
18	24	1.6	38	21/4	25/8	18.00	.80
33	-4	16	6	3 4	21/4	3.50	.90
110	2 1/2	÷3%	36	3	3 /4	25.00	.90
120.	36	178	48	3	3	40.00	.90
34	71/	13	7	31/2	21/2	5.00	1.00
36	81/2	89	7	35/8	25/8	6.00	1.20
S4		÷ 15	-	23/8	71%	14.00	1.30
S1	51/2	\$72	7	478	61/2	15.00	1.30
38	01/	÷ /2	7	5	3	9.00	1.30
310	91/2	72	7	43/4	4	11.00	1.40
312	111/4	9 16 5/8	7	174	6	12.00	2.00
312	11½ 13½	^{3/8} ^{3/4}	6	6	4 1/2	16.00	2.50

Plain Idler Wheels

P5	41/2	1/4	None	1	13/8	1.50	
P10	51/4	1/4	None	11/8	13/8	2.00	
P20	7 4	9	None	1 1/2	13/8	2.50	
P30	81/4	5	None	13/4	1 1/2	3.00	
P40	93/4	3/8	None	1 3/4	21/8	6.00	
PS11	11	16	None	3 1/2	23/8	8.00	
P60	121/2	16	None	21/4	23/8	8.50	

^{*, †, ‡} indicates that wheels with the same mark take the same chain.

Hub dimensions can be varied to meet specifications. Wheels bored and keyseated as ordered. Prices for block chain on application.

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